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AMENDMENTS TO THE CLAIMS:

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1.   (Currently amended) A computer program product, for use with a computer system, for directing the computer system to execute a search of information resources, the resources having content-based links between each other, to identify a desired subset of the information resources which satisfy a desired criterion, the computer program product comprising:

a computer-readable medium;

means, provided on the recording medium, for directing the computer system to identify an initial set of information resources ~~based on a keyword-based query~~;

means, provided on the recording medium, for directing the computer system to define initial authoritativeness information for the initial set;

means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, for selectively producing ~~to produce~~ at least one set of authoritativeness information based on one of links ~~related~~ to resources of the input set and links from resources of the input set; and

means, provided on the recording medium, for directing the computer system to produce a final set of information resources based on the at least one set of authoritativeness information.

2.   (Previously presented) A computer program product as recited in claims 1 or 58 or 59 or 60, wherein the information resources include World Wide Web pages, and the content-based links include hyper-links.

3.   (Previously presented) A computer program product as recited in claims 1 or 58 or 59 or 60, wherein the means for directing to identify an initial set of information resources includes means, provided on the recording medium, for directing the computer system to obtain, as an input, an information resource containing subject matter of interest.

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4.   (Original) A computer program product as recited in claim 3, wherein the means for directing to identify an initial set of information resources includes means, provided on the recording medium, for directing the computer system to obtain, as an input, an information resources linked to the input information resource.

5.   (Previously presented) A computer program product as recited in claim 58, wherein said producing first and second authoritativeness information is operative in a series of iterations,
       wherein the initial authoritativeness information is used as input authoritativeness information for a first iteration, and
       wherein the produced first and second authoritativeness information is a result of the iteration, the first and second authoritativeness information produced in a given iteration to be used as the input authoritativeness information for the next iteration.

6.   (Previously presented) A computer program product as recited in claim 56 further comprising:
       means, provided on the recording medium, for directing the computer system to produce first authoritativeness information and second authoritativeness information in a series of iterations until a predetermined condition is met..

7.   (Original) A computer program product as recited in claim 6, wherein the predetermined condition includes the execution of a specified number of iterations.

8.   (Original) A computer program product as recited in claim 6, wherein the predetermined condition includes a steady state in which further iterations result in substantially the same results.

9.   (Original) A computer program product as recited in claim 6, wherein the means for directing to identify an initial set of information resources includes means, provided on the

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recording medium, for directing the computer system to execute a keyword-based query search, results of the search including information resources to be included in the initial set.

10.   (Original) A computer program product as recited in claim 9, wherein the means for directing to identify an initial set of information resources includes means, provided on the recording medium, for directing the computer system to identify information resources linked to or from the information resources which are the results of the search, the former information resources also to be included in the initial set.

11.   (Original) A computer program product as recited in claim 10, wherein the means for directing to define initial authoritativeness information includes means, provided on the recording medium, for directing the computer system to select an initial numerical authoritativeness value for each of the information resources of the initial set.

12.   (Original) A computer program product as recited in claim 11, wherein the means for directing to define initial authoritativeness information further includes means, provided on the recording medium, for directing the computer system to define an authority value and a hub value for each of the information resources of the initial set.

13.   (Original) A computer program product as recited in claim 12, wherein the defined authority values and hub values are processed as vectors, each vector containing a respective term corresponding with each respective one of the information resources of the initial set, and having stored therein the value defined for that respective one of the information resources of the initial set.

14.   (Previously presented) A computer program product as recited in claim 12, wherein an initial hub value is defined as 1 if the information resource was found by the keyword-based query search, and 0 if the information resource is linked to or from the information resources

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which are the results of the search, and

 wherein an initial authority value is defined as 0 for all information resources.

15. (Original) A computer program product as recited in claim 12, wherein for each iteration:

 the hub value for an information resource is updated as the sum of the authority values for authority information resources which point to the hub information resource; and

 the authority value for an information resource is updated as the sum of the hub values for hub information resources which are pointed to by the information resource.

16. (Original) A computer program product as recited in claim 15, wherein each iteration further includes normalizing the hub and authority values for the information resources.

17. (Previously presented) A computer program product as recited in claims 1 or 58 or 59 or 60, wherein the means for directing to produce a final set of information resources includes means, provided on the recording medium, for directing the computer system to select information resources from the set based on their hub and authority values.

18. (Original) A computer program product as recited in claim 17, wherein the means for directing to select includes means, provided on the recording medium, for directing the computer system to select information resources whose hub values or authority values have greatest magnitudes.

19. (Original) A computer program product as recited in claim 17, wherein the means for directing to select includes means, provided on the recording medium, for directing the computer system to select a plurality of successive communities, selecting each successive community including selecting information resources whose hub values or authority values have greatest magnitudes of those information resources not already selected for a prior community.

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20.   (Currently amended) A method for executing a search of information resources, the resources having content-based links between each other, to identify a desired subset of the information resources which satisfy a desired criterion, the method comprising:

identifying an initial set of information resources ~~based on a keyword-based query~~;

defining initial authoritativeness information for the initial set;

using the initial authoritativeness information as input authoritativeness information,~~-~~for selectively producing at least one set of authoritativeness information based on one of links ~~related~~ to resources of the input set and links from resources of the input set; and

producing a final set of information resources based on the at least one set of authoritativeness information.

21.   (Previously presented) A method as recited in claims 20 or 61 or 62 or 63, wherein the information resources include World Wide Web pages, and the content-based links include hyperlinks.

22.   (Previously presented) A method as recited in claims 20 or 61 or 62 or 63, wherein said identifying an initial set of information resources includes obtaining, as an input, an information resource containing subject matter of interest.

23.   (Previously presented) A method as recited in claim 22, wherein said identifying an initial set of information resources includes obtaining, as an input, an information resource containing subject matter of interest.

24.   (Previously presented) A method as recited in claim 61, wherein said producing first and second authoritativeness information are executed in a series of iterations,

wherein the initial authoritativeness information is used as input authoritativeness information for a first iteration, and

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wherein the produced first and second authoritativeness information is a result of the iteration, the first and second authoritativeness information produced in a given iteration to be used as the input authoritativeness information for the next iteration.

25.   (Previously presented) A method as recited in claim 61, wherein said producing first authoritativeness information and producing second authoritativeness information are executed in a series of iterations until a predetermined condition is met.

26.   (Original) A method as recited in claim 25, wherein the predetermined condition includes the execution of a specified number of iterations.

27.   (Original) A method as recited in claim 25, wherein the predetermined condition includes a steady state in which further iterations result in substantially the same results.

28.   (Previously presented) A method as recited in claim 25, wherein said identifying an initial set of information resources includes executing a keyword-based query search, the results of the search including information resources to be included in the initial set.

29.   (Previously presented) A method as recited in claim 28, wherein said identifying an initial set of information resources further includes identifying information resources linked to or from information resources which are the results of the search, the former information resources also to be included in the initial set.

30.   (Previously presented) A method as recited in claim 29, wherein said defining initial authoritativeness information includes selecting an initial numerical authoritativeness value for each of the information resources of the initial set.

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31.   (Previously presented) A method as recited in claim 30, wherein said defining initial authoritativeness information further includes defining an authority value and a hub value for each of the information resources of the initial set.

32.   (Original) A method as recited in claim 31, wherein the defined authority values and hub values are processed as vectors, each vector containing a respective term corresponding with each respective one of the information resources of the initial set, and having stored therein the value defined for that respective one of the information resources of the initial set.

33.   (Previously presented) A method as recited in claim 31, wherein an initial hub value is defined as 1 if the information resource was found by the keyword-based query search, and 0 if the information resource is linked to or from the information resources which are the results of the search, and an initial authority value is defined as 0 for all information resources.

34.   (Original) A method as recited in claim 31, wherein, for each iteration:
        the hub value for an information resource is updated as the sum of the authority values for authority information resources which point to the hub information resource; and
        the authority value for an information resource is updated as the sum of the hub values for hub information resources which are pointed to by the information resource.

35.   (Original) A method as recited in claim 34, wherein each iteration further includes normalizing the hub and authority values for the information resources.

36.   (Previously presented) A method as recited in claims 20 or 61 or 62 or 63, wherein each information resource is associated with an authority value and a hub value, and said producing a final set of information resources includes selecting information resources from the set based on the hub and authority values.

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37.   (Previously presented) A method as recited in claim 36, wherein said selecting includes selecting information resources whose hub values or authority values have greatest magnitudes.

38.   (Previously presented) A method as recited in claim 36, wherein said selecting includes selecting a plurality of successive communities, selecting each selective community includes selecting information resources whose hub values or authority values have greatest magnitudes of those information resources not already selected for a prior community.

39.   (Currently amended) A system for executing a search of information resources, the resources having content-based links between each other, to identify a desired subset of the information resources which satisfy a desired criterion, the system comprising:

means for identifying an initial set of information resources ~~based on a keyword-based query~~;

means for defining initial authoritativeness information for the initial set;

means for using the initial authoritativeness information as input authoritativeness information, <u>for selectively producing</u> ~~to produce~~ at least one set of authoritativeness information based on <u>one of</u> links ~~related~~ to resources of the input set <u>and links from resources of the input set</u>; and

means for producing a final set of information resources based on the at least one set of authoritativeness information.

40.   (Previously presented) A system as recited in claims 39 or 64 or 65 or 66, wherein the information resources include World Wide Web pages, and the content-based links include hyperlinks.

41.   (Previously presented) A system as recited in claims 39 or 64 or 65 or 66, wherein the means for identifying an initial set of information resources includes means for obtaining, as an input, an information resource containing subject matter of interest.

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42.   (Original) A system as recited in claim 41, wherein the means for identifying an initial set of information resources includes means for identifying a further set of information resources linked to the input information resource.

43.   (Previously presented) A system as recited in claim 64, wherein said producing first and second authoritativeness information are operative in a series of iterations,

wherein the initial authoritativeness information is used as input authoritativeness information for a first iteration, and

wherein the produced first and second authoritativeness information is a result of the iteration, the first and second authoritativeness information produced in a given iteration to be used as the input authoritativeness information for the next iteration.

44.   (Previously presented) A system as recited in claim 64 further comprising:

producing first authoritativeness information and producing second authoritativeness information in a series of iterations until a predetermined condition is met.

45.   (Original) A system as recited in claim 44, wherein the predetermined condition includes the execution of a specified number of executions.

46.   (Original) A system as recited in claim 44, wherein the predetermined condition includes a steady state in which further iterations result in substantially the same results.

47.   (Original) A system as recited in claim 44, wherein the means for identifying an initial set of information resources includes means for executing a keyword-based query search, results of the search including information resources to be included in the initial set.

48.   (Original) A system as recited in claim 47, wherein the means for identifying an initial set of information resources further includes means for identifying information resources linked to or

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from information resources which are the results of the search, the former information resources also to be included in the initial set.

49.   (Original) A system as recited in claim 48, wherein the means for defining initial authoritativeness information includes means for selecting an initial numerical authoritativeness value for each of the information resources of the initial set.

50.   (Original) A system as recited in claim 49, wherein the means for defining initial authoritativeness information further includes means for defining an authority value and a hub value for each of the information resources of the initial set.

51.   (Original) A system as recited in claim 50, wherein the defined authority values and hub values are processed as vectors, each vector containing a respective term corresponding with each respective one of the information resources of the initial set, and having stored therein the value defined for that respective one of the information resources of the initial set.

52.   (Previously presented) A system as recited in claim 50, wherein an initial hub value is defined as 1 if the information resource was found by the keyword-based query search, and 0 if the information resource is linked to or from the information resources which are the results of the search, and an initial authority value is defined as 0 for all information resources.

53.   (Original) A system as recited in claim 50, wherein, for each iteration:
        the hub value for an information resource is updated as the sum of the authority values for authority information resources which point to the hub information resource; and
        the authority value for an information resource is updated as the sum of the hub values for hub information resources which are pointed to by the information resource.

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54. (Original) A system as recited in claim 53, wherein each iteration further includes normalizing the hub and authority values for the information resources.

55. (Previously presented) A system as recited in claims 39 or 64 or 65 or 66, wherein the means for producing a final set of information resources includes means for selecting information resources from the set based on their hub and authority values.

56. (Original) A system as recited in claim 55, wherein the means for selecting includes means for selecting information resources whose hub values or authority values have greatest magnitudes.

57. (Original) A system as recited in claim 55, wherein the means for selecting includes means for selecting a plurality of successive communities, selecting each successive community including information resources whose hub values or authority values have greatest magnitudes of those information resources not already selected for a prior community.

58. (Currently amended) A computer program product as recited in claim 1, wherein said selectively producing at least one set of authoritativeness information ~~based on links related to resources of the input set,~~ includes:

  producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set, and

  producing second authoritativeness information about a set of information resources having links that point to resources of the input set.

59. (Currently amended) A computer program product as recited in claim 1, wherein said producing at least one set of authoritativeness information based on links related to resources of the input set includes producing authoritativeness information about a set of information resources pointed to by links in resources of the input set.

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60. (Currently amended) A method as recited in claim 1, wherein said <u>selectively</u> producing at least one set of authoritativeness information based on links related to resources of the input set includes producing authoritativeness information about a set of information resources having links that point to resources of the input set.

61. (Currently amended) A method as recited in claim 20, wherein said <u>selectively</u> producing at least one set of authoritativeness information based on links related to resources of the input set includes producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set, and producing second authoritativeness information about a set of information resources having links that point to resources of the input set.

62. (Currently amended) A method as recited in claim 20, wherein said <u>selectively</u> producing at least one set of authoritativeness information based on links related to resources of the input set includes producing authoritativeness information about a set of information resources pointed to by links in resources of the input set.

63. (Currently amended) A method as recited in claim 20, wherein said <u>selectively</u> producing at least one set of authoritativeness information based on links related to resources of the input set includes producing authoritativeness information about a set of information resources having links that point to resources of the input set.

64. (Currently amended) A system as recited in claim 39, wherein said <u>selectively</u> producing at least one set of authoritativeness information based on links related to resources of the input set includes producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set, and producing second authoritativeness information about a set of information resources having links that point to resources of the input set.

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65. (Currently amended) A system as recited in claim 39, wherein said <u>selectively</u> producing at least one set of authoritativeness information ~~based on links related to resources of the input set~~ includes producing authoritativeness information about a set of information resources pointed to by links in resources of the input set.

66. (Currently amended) A system as recited in claim 39, wherein said <u>selectively</u> producing at least one set of authoritativeness information ~~based on links related to resources of the input set~~ includes producing authoritativeness information about a set of information resources having links that point to resources of the input set.

67. (Currently amended) A computer program product as recited in claim 1, wherein said means for directing said computer system to<u> identify an initial set of information resources comprises a means for directing said computer system to identify an initial set of information resources based on a keyword-based query</u> ~~use the initial authoritativeness information as input authoritativeness information, selectively produces at least one set of authoritativeness information based on at least one of links to and links from resources of the input set.~~

68. (Previously presented) A computer program product as recited in claim 1, wherein said links related to resources of the input set comprise at least one of links to and links from said resources of the input set.

69. (Previously presented) A computer program product as recited in claim 1, wherein said initial set is identified using a term-matching algorithm.

70. (Previously presented) A computer program product as recited in claim 1, wherein said final set of information resources comprises said initial set of information resources and a refined set of information resources having at least one of a link from and a link to said information resources in said initial set of information resources.

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71. (New) A computer program product, for use with a computer system, for directing the computer system to execute a search of information resources, the resources having content-based links between each other, to identify a desired subset of the information resources which satisfy a desired criterion, the computer program product comprising:

a computer-readable medium;

means, provided on the recording medium, for directing the computer system to identify an initial set of information resources;

means, provided on the recording medium, for directing the computer system to define initial authoritativeness information for the initial set;

means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to produce first authoritativeness information about a set of information resources pointed to by links in resources of the input set, and produce second authoritativeness information about a set of information resources having links that point to resources of the input set; and

means, provided on the recording medium, for directing the computer system to produce a final set of information resources based on the first and second authoritativeness information.

72. (New) A method for executing a search of information resources, the resources having content-based links between each other, to identify a desired subset of the information resources which satisfy a desired criterion, the method comprising:

identifying an initial set of information resources;

defining initial authoritativeness information for the initial set;

using the initial authoritativeness information as input authoritativeness information, to produce first authoritativeness information about a set of information resources pointed to by links in resources of the input set, and produce second authoritativeness information about a set of information resources having links that point to resources of the input set; and

producing a final set of information resources based on the first and second authoritativeness information.

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73.   (New) A system for executing a search of information resources, the resources having
content-based links between each other, to identify a desired subset of the information resources
which satisfy a desired criterion, the system comprising:

means for identifying an initial set of information resources;

means for defining initial authoritativeness information for the initial set;

means for using the initial authoritativeness information as input authoritativeness
information, to produce first authoritativeness information about a set of information resources
pointed to by links in resources of the input set, and produce second authoritativeness
information about a set of information resources having links that point to resources of the input
set; and

means for producing a final set of information resources based on the first and second
authoritativeness information.